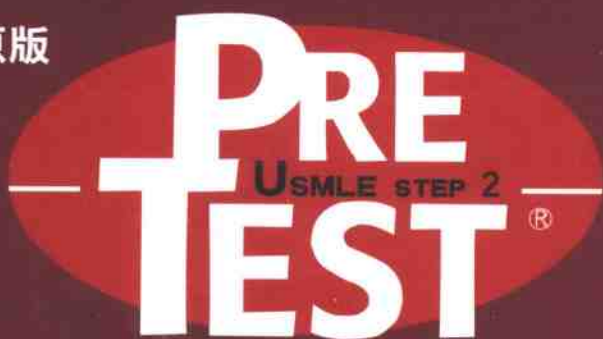


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Chest Radiology: Pre Test Self-Assessment and Review

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PREFACE

Chest Radiography: PreTest® Self-Assessment and Review has been designed for medical students and physicians in training. Its basic format parallels the questions in the various steps of the United States Medical Licensing Examinations (USMLE). The design of the book is unique in this series and will serve as a guide for physicians in training. The cases have been compiled on the basis of radiographic patterns and clinical scenarios to enable quicker reference. The Quick Reference guide at the end of the book will help the reader to focus on a particular type of radiographic abnormality and correlate it with a likely applicable clinical scenario. At the same time, this book does not compromise on the basic concept of the PreTest® series and enables the student/reader to prepare for the examination questions that pertain to pulmonary problems within chest x-rays. The clinical items are followed by questions that are based on knowledge of physical examination, associated medical conditions, and broad diagnostic and management strategies to provide a comprehensive educational review. The answers are divided into parts dealing with basic chest radiograph interpretation, followed by a general discussion of related radiographic patterns focused on in that chapter and concluding with the point-by-point answers to specific questions in that chapter. A glossary of terms commonly used in chest radiograph interpretation is also provided to help the reader understand descriptive terms. Thus, this book serves to provide a broadened scope of internal medicine review as well as a medium of instructional learning on how to interpret chest radiographs. It invites the reader to think through the diagnostic and management steps of each case while answering the various components of the questions. This format will also be useful to physicians in training who want to refresh their chest x-ray interpretation techniques in a day-to-day clinical setting.

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We dedicate this text to the patients seen at the Medical Center of Louisiana, Charity and University Campus, New Orleans.



Chest Radiology

PreTest® Self-Assessment and Review

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DIRECTIONS: Each item below contains a question or incomplete statement followed by suggested responses. Select the **one best** response to each question.

1. A 40-year-old male smoker presents with a history of chronic cough. He has had symptoms of an upper respiratory illness for a few months since visiting family in Arizona. Physical exam is normal. CXR is shown below in Fig. 1. The next step in management should be

- a. Complete pulmonary function tests
- b. Fiberoptic bronchoscopy
- c. Percutaneous needle biopsy
- d. Observation and repeat CXR in 6 to 8 mo

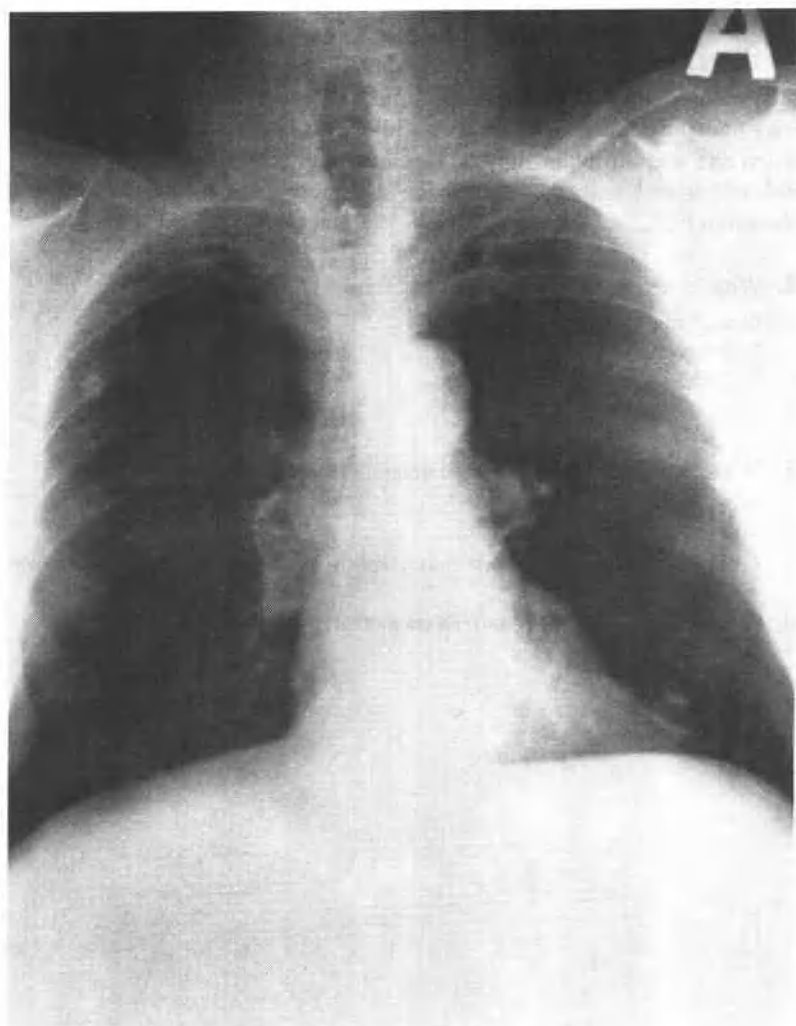


Fig. 1

Items 2–3

A 34-year-old woman, a recent immigrant from Eastern Europe, is seen with complaints of vague chest discomfort after an upper respiratory tract infection. She is not a smoker and gives a history of BCG vaccination when she was an infant. Physical examination is normal. PPD is 10-mm induration and induced sputum for acid-fast bacilli is negative. CXR is shown in Fig 2.

- 2.** What is the most likely diagnosis?
 - a. Granuloma
 - b. Scar carcinoma
 - c. Coccidioidomycosis
 - d. Hamartoma

- 3.** What is the next step in the management of this patient?
 - a. MRI of the chest
 - b. Fiberoptic bronchoscopy
 - c. Comparison of previous chest radiograph, if available, and repeat chest radiograph in 3 mo
 - d. Treatment with four-drug anti-TB chemotherapy

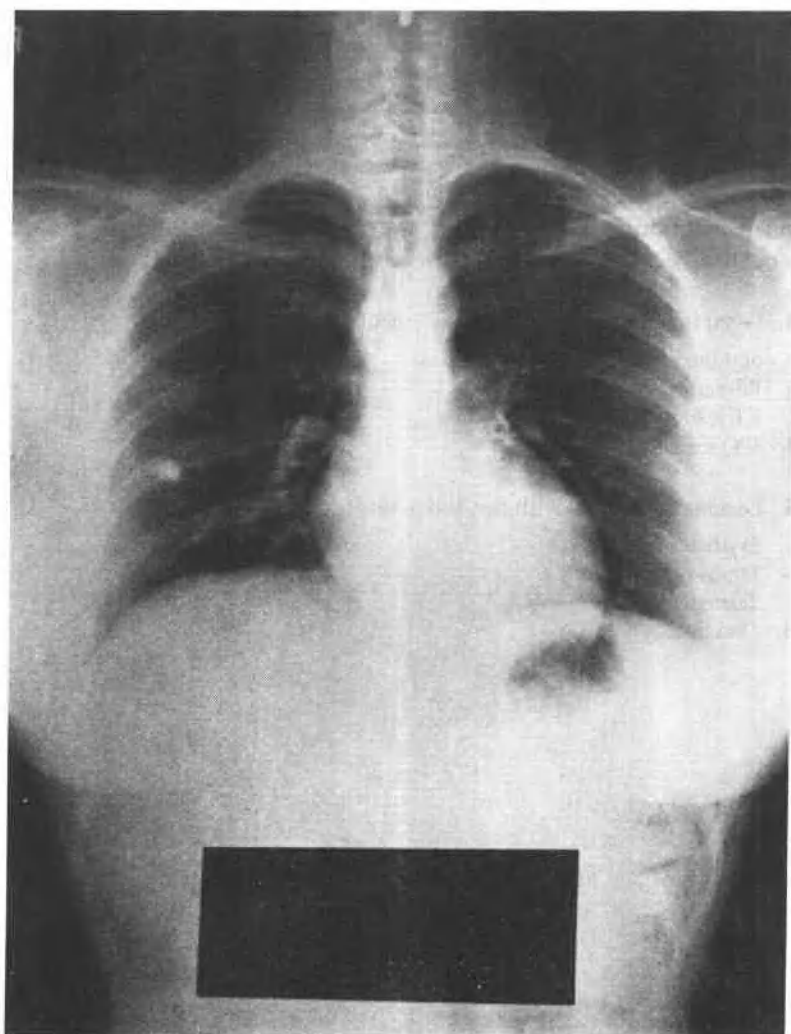


Fig. 2

Items 4–5

A 30-year-old female nonsmoker who recently moved to the U.S. from Mexico presents with dyspnea on exertion. Her PPD is 8 mm. On physical examination, her pulse is 110 bpm, blood pressure is 110/70 mm Hg, and she has mild clubbing, cyanosis, and orthodeoxia. Otherwise, her physical exam is normal. Laboratory data: Hb 14 g/dL; Hct 42%; WBCs 11,000/ μ L; differential normal. ABGs on room air: pH 7.42; PCO_2 38 mm Hg; PO_2 70 mm Hg. CXR is shown in Fig. 3.

4. What is the next step in the management of this patient?

- a. Sputum for fungal culture
- b. Rib series
- c. CT scan with contrast of the chest
- d. V/Q scan

5. Lesions associated with the above disorder include

- a. Erythema nodosum
- b. Lupus pernio
- c. Telangiectasia
- d. Oral thrush